Current Status and Prospect of Surface and Bulk Acoustic Wave Devices for Mobile Communications

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Ken-ya Hashimoto was born in Fukushima, Japan, on March 2, 1956. He received his B.S. and M.S. degrees in electrical engineering in 1978 and 1980, respectively, from Chiba University, Japan, and his Dr. Eng. degree from Tokyo Institute of Technology, Japan, in 1989.

In 1980, he joined Chiba University as a Research Associate, and is now a Professor of the University. For 2013-2015, he was the Director of the Center for the Frontier Science, Chiba University.

In 1998, he was a Visiting Professor of Helsinki University of Technology, Finland. In the winter of 1998/1999, he was a Visiting Scientist of the Laboratoire de Physique et Metrologie des Oscillateurs, CNRS, France. In 1999 and 2001, he was a Visiting Professor of the Johannes Kepler University of Linz, Austria. He was a Visiting Scientist of the Institute of Acoustics, Chinese Academy of Science, Beijing, China in 2005/2006. For 2009-2012, he was a Visiting Professor of the University of Electronic Science and Technology of China, Chengdu, China.

In 2001, he served as a guest co-editor of the IEEE (Institute of Electrical and Electronics Engineers) Transactions on Microwave Theory and Techniques (MTT) Special Issue on Microwave Acoustic Wave Devices for Wireless Communications, and a publicity co-chair of the 2002 and 2015 IEEE International Ultrasonics Symposia. He was appointed to a member of the speaker's bureau of the IEEE MTT Society. He also served as an International Distinguished Lecturer of the IEEE Ultrasonics, Ferroelectrics, and Frequency Control (UFFC) Society from 2005 to 2006, an Administrative Committee (ADCOM) Member of the IEEE UFFC Society from 2007 to 2009 and from 2014 to 2016, a Distinguished Lecturer of IEEE Electron Device Society from 2007 to 2009, and a general co-chair of the 2011 and 2018 IEEE International Ultrasonics Symposia. In 2015, he received the Ichimura Industrial Award from the New Technology Development Foundation for "Development of Optimal Substrate 42-LT for Radio Frequency Surface Acoustic Wave Devices".

His current research interests include simulation and design of various high-performance surface and bulk acoustic wave devices, acoustic wave sensors and actuators, piezoelectric materials and RF circuit design.

Dr. Hashimoto is a Fellow of IEEE, and a Member of the Institute of Electronics, Information and Communication Engineers of Japan, the Institute of Electrical Engineers of Japan, and the Acoustical Society of Japan.